

14. (Amended) A projection type display apparatus according to claim 13, wherein said diffractive optical element is a hologram.

15. (Amended) A projection type display apparatus according to claim 13, further comprising at least reflecting mirror which is so disposed as to be parallel with the plane for display in an optical path between the original and the plane for display.

REMARKS

Applicant respectfully requests reconsideration of this application in view of the foregoing amendments and following remarks.

Status of claims

Claims 1-15 are pending in this application. Among the claims, claims 1 and 13 are independent. Claims 1-10 and 13 have been rejected under 35 U.S.C. §102(b). Claims 11-12 and 15 have been rejected under 35 U.S.C. §103(a).

Rejection under 35 U.S.C. §102

In paragraph two (2) of the Office Action, claims 1-10 and 13 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,442,413 to Tejima et al. (hereinafter “Tejima”). The Examiner indicated that all of the elements of the claims are disclosed in Tejima.

Claims 1 and 13 have been amended for further clarification of the invention. In particular, each of claims 1 and 13, as amended, recites that “said diffractive optical element has a diffracting portion sandwiched between a pair of transparent plates.” Support for the amendment may be found, for example, at page 8, lines 19-24 along with Fig. 3 of the

specification as originally filed. One of the advantages of the added feature of the claims is that it allows the diffractive optical element to be protected from outside.

Applicant believes that Tejima fails to show or suggest the added feature of claims 1 and 13. Accordingly, each of claims 1 and 13 is neither anticipated by nor rendered obvious in view of Tejima for at least the reasons discussed above.

Reconsideration and withdrawal of the rejections of claims 1 and 13 under 35 U.S.C. §102(b) is respectfully requested.

Rejection under 35 U.S.C. §103

In paragraph three (3) of the office action, claims 11, 12 and 15 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Tejima in view of U.S. Patent No. 5,833,339 to Sarayeddine (“Sarayeddine”).

Sarayeddine is cited as disclosing a plurality of reflecting mirrors which are disposed parallel with the surface for projection.

Sarayeddine, however, fails to show or suggest the added features in claims 1 and 13 as amended (i.e., diffractive optical element has a diffracting portion sandwiched between a pair of transparent plates) from which claims 11, 12 and 15 depend. Accordingly, each of claims 11, 12 and 15 is neither anticipated by nor rendered obvious in view of Tejima and Sarayeddine, either alone or in combination.

Reconsideration and withdrawal of the rejections of claims 11, 12 and 15 under 35 U.S.C. §103(a) is respectfully requested.

Applicant has not individually addressed the rejections of the dependent claims because Applicant submits that the foregoing places the independent claims from which they respectively

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depend in condition for allowance. Applicant however reserves the right to address such rejections of the dependent claims should such be necessary.

Applicant believes that the all claims are hereby in condition for allowance and such action is respectfully requested.

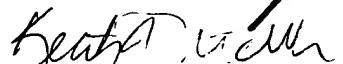
AUTHORIZATION

A petition for a two-month extension of time along with the associated fee is enclosed, extending the date for responding until February 13, 2003. Should an additional extension of time be required to render this paper timely filed, such extension is hereby petitioned and the Commissioner is authorized to charge any other fees necessitated by this Amendment, or credit any overpayment to our Deposit Account No. 13-4500 (Order No. 1232-4651). **A DUPLICATE COPY OF THIS SHEET IS ENCLOSED.**

An early and favorable examination on the merits is respectfully requested.

Respectfully submitted,
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Dated: February 10, 2003

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Version with Markings to Show Changes MadeIN THE CLAIMS

Please amend claims 1, 2, 3, 4, 7, 8, 9 and 11-15 as follows.

1. (Twice Amended) A projection type display apparatus comprising:

a first projection optical system for obliquely projecting light from an original [picture] onto a predetermined [surface] plane, said first projection optical system forming an intermediate image of the original [picture] on or near said predetermined [surface] plane;

a second projection optical system for obliquely projecting the light from said predetermined [surface] plane onto a [surface for projection] plane for display; and

light deflecting means disposed between said first projection optical system and said second projection optical system for deflecting the light emerging from said first projection optical system to the second projection optical system;

[wherein an optical axis of said first projection optical system is deflected by said light deflecting means to substantially coincide with the optical axis of said second projection optical system,

and] wherein said light deflecting means has a [diffracting] diffractive optical element, and said diffractive optical element has a diffracting portion sandwiched between a pair of transparent plates.

2. (Amended) A projection type display apparatus according to claim 1, wherein said light deflecting means is disposed on said predetermined [surface] plane.

3. (Amended) A projection type display apparatus according to claim 1, wherein said light deflecting means is constituted by a transmission type [diffracting] diffractive optical element.

4. (Amended) A projection type display apparatus according to claim 1, wherein said light deflecting means is constituted by a reflection type [diffracting] diffractive optical element.

7. (Amended) A projection type display apparatus according to claim 1, wherein said [surface for projection] plane for display has an eccentric Fresnel lens.

8. (Amended) A projection type display apparatus according to claim 1, wherein said [surface for projection] plane for display has a plurality of eccentric Fresnel lenses.

9. (Amended) A projection type display apparatus according to claim 1, wherein said [surface for projection] plane for display has a lenticular lens.

11. (Twice Amended) A projection type display apparatus according to claim 1, further comprising a plurality of reflecting mirrors which are so disposed to be parallel with the [surface for projection] plane for display.

12. (Amended) A projection type display apparatus according to claim 1, which is of a rear projection type projecting an image from the rear onto the [surface for projection] plane for display.

13. (Amended) A projection type display apparatus comprising:

a first projection optical system for obliquely projecting light from an original [picture] onto a predetermined [surface] plane, said first projection optical system forming an intermediate image of the original [picture] on said predetermined [surface] plane;

a second projection optical system for obliquely projecting the light from said predetermined [surface] plane onto a [surface for projection] plane for display; and

wherein an optical axis of said first projection optical system is [deflected by said light deflecting means] bent by using a diffractive optical element to substantially coincide with an optical axis of said second projection optical system, [and

wherein said light deflecting means has a diffracting optical element] said diffractive optical element having a diffracting portion sandwiched between a pair of transparent plates.

14. (Amended) A projection type display apparatus according to claim 13, wherein said [diffracting] diffractive optical element is a hologram.

15. (Amended) A projection type display apparatus according to claim 13, further comprising at least reflecting mirror which is so disposed as to be parallel with the [surface for projection] plane for display in an optical path between the original [picture] and the [surface for projection] plane for display.